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SASQUATCH FOOTPRINTS: A PROPOSED METHOD OF FABRICATION

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ABSTRACT: Giant anthropoid footprints, attributed to the Sasquatch (Bigfoot) and showing dermatoglyphic sculpture on the soles, are not, as claimed, incapable of being faked. They can be fabricated by enlargement of human footprints using the von Fuehrer latex expansion technique.

Readers of this journal need no introduction to the Sasquatch (Bigfoot), an elusive large, bipedal primate that is said to haunt the woods of the northwestern United States, neighboring Canada and elsewhere. Most of the evidence that has been advanced to prove the existence of such a creature—sighting reports, still and motion pictures, hair and fecal samples—is either insufficiently documented, dubious, irrelevant, or spurious. The legitimate investigators of the phenomenon concede the inadequacy of such testimonials, but they point to what they consider to be hard evidence in the form of giant footprints, observed *in situ* and preserved by plaster-casting. Some such footprints, which have been most carefully documented by Krantz (1983), display what all competent observers agree to be genuine dermatoglyphic "fingerprint" patterns and sweat pores of the type found in higher primates.

Proponents further assert that it would be impossible to fake such footprints. This assertion, I submit, is mistaken. To make an impressively convincing Sasquatch track by enlarging a human footprint is not a difficult trick, nor is it a new trick. I learned the enlargement technique in 1939 from its inventor, staff artist Ottmar F. von Fuehrer, of the Carnegie Museum in Pittsburgh, who published it that same year in *Museum News* (Fuehrer 1939). Paleontological applications of the method were later published by me (Baird 1951, 1974). The technique was also mentioned on page 393 of the *Handbook of Paleontological Techniques* (Kummel and Raup 1965); thus, it is hardly a trade secret, at least among paleontologists. The present paper is intended for anthropologists and cryptozoologists who may not be aware of it.

Let it be clearly understood that, in presenting this information, I cast no aspersion on any person, nor do I presume to judge (without first-hand examination) the genuineness or otherwise of footprints that have been

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attributed to the Sasquatch. I merely wish to describe how such footprints can be fabricated by anyone who has such an inclination.

The following materials are what are needed:

1. A pair of human feet to serve as models.
2. Natural latex molding compound (about 1 quart).
3. Kerosene or other light oil.
4. Plaster of paris, preferably the type sold as molding plaster.
5. Silicone rubber molding compound (optional, about 1 quart).

The latex molding compound required is a thick (about 72% solid) suspension of prevulcanized latex particles in water, having about the consistency of cold cream. In small quantities (1 quart to 1 gallon), it has been sold by jobbers at different times and places under a variety of names, including "Von Fuehrer Compound," "Permamold Latex Molding Compound," and "E & R Latex Mold Rubber." In seeking a local supplier, one should describe the product and specify that one wants "sweet latex" that is only slightly alkaline. Note that this is a very different product from the so-called "sculptors' latex," a watery compound that pours like restaurant maple syrup and reeks of ammonia. I cannot recommend the latter product for any purpose, except, perhaps, for pouring down bee-nests in the garden.

Molding compound is applied to the model in thin layers with a brush or with fingers, taking special care in the first application to work the compound well into the surface and eliminate air bubbles. Each coat needs several hours to dry, though this may be speeded-up by applying mild heat (as from a light bulb) or a breeze (as from an electric fan). A thickness of two to three millimeters will require four to six coats. Obviously, this will not do for duplicating the soles of a human subject (other than a medical cadaver or a hospital patient in traction), so the first impression of the feet should be taken in a tray of plaster of paris. Heat generated by the plaster as it sets may cause some discomfort, and the subject may need to be reassured that plaster is very different from cement. The feet can be withdrawn after 20 minutes or so, and the plaster should be allowed to dry thoroughly. Molding compound can then be applied to the impressions as described above, producing rubber casts of the soles.

Now comes the trick. A latex mold or cast, when treated with kerosene or some similar light oil, will swell and expand by 40% to 50% of its original linear dimensions *while retaining its surface detail*. As the oil-treated rubber loses its tensile strength and elasticity, only a single plaster casting can be made from it; the rubber will disintegrate as it is pulled off. When the plaster is quite dry, a second and larger rubber cast can be made as before, and, if further enlargement is desired, this cast can be oil-treated like the first. The process can be repeated indefinitely.

In the late 1930's, von Fuehrer used to impress the audiences at his Carnegie Museum lectures by holding up the wing of a dragonfly, then an enlarged rubber replica of it, then another, and another, each half again the size of the last, each showing plainly the venation and other surface features of the original. Finally, to delighted applause, he would reach down into his bag and haul out a rubber dragonfly wing nearly two meters long!

In making that series of enlarged replicas, the oil had been applied uniformly to the rubber so that no distortion of shape resulted. However, as von Fuehrer discovered, it is possible to induce distortion deliberately by applying varying amounts of oil to different parts of the cast. In the case of a footprint, one could differentially increase the width or the length, widen the splay of the toes, or lengthen some toes relative to the others. Through all this manipulation, the dermatoglyphic pattern of the toes and sole will be faithfully reproduced in enlargement, along with sweat-pores, wrinkles, and other surface features.

As Krantz (1983) has correctly pointed out, the latex-and-kerosene technique will expand the ridge spacing of the skin pattern to the same extent that it enlarges the overall dimensions of the sole. In his opinion, the result would be "easily recognizable as abnormal." On this point I beg to differ. A footprint that is, say, double the normal human size will strike any viewer as grossly abnormal, but doubling the ridge spacing—an effect measurable in fractions of a millimeter—is a much more subtle effect. With all respect to Krantz, I believe the enlargement would not be perceived as being extraordinary. On the contrary, it seems to me, a Sasquatch-sized footprint with a human-sized dermatoglyphic pattern should give us greater grounds for suspicion.

Once the desired size and shape have been achieved, one can then make a pair of soles, left and right, with which to imprint trackways in the field. To make footprints with rigid plaster casts would be crude and unsubtle; it would be better to cast the soles in flexible rubber. For this purpose, one could use the same latex as a casting medium, building it up in successive coats with layers of cheesecloth incorporated as a filler and stiffener. On the whole, however, it would be simpler and more satisfactory to cast the soles in silicone rubber, which can be poured to the desired thickness (about 1 cm) in one operation.

To duplicate the long (1.2 m) stride and the deep impressions of a Sasquatch trackway, it is not necessary to fasten the rubber soles to one's feet and go leaping through the wilderness while wearing several hundred pounds of handicapping weights—as advocates of the Sasquatch claim a faker would have to do. Instead, one may simply lay the soles on the ground in the appropriate sequence and tamp them down, in turn, with a mallet and stake.

By differential pounding in different areas of the sole, one can make the

footprints deeper in the heel area, or the toe area, or in between. Also, while performing these shenanigans, one will want to bag one's own feet with padding so as not to leave Smallfoot tracks alongside those of the Bigfoot.

References Cited

Baird, Donald
1951 Latex Molds in Paleontology. *Compass of Sigma Gamma Epsilon,* Vol. 28(4): 339–45.
1974 Latex Vormen in de Palaeontologie. *Museologia,* No. 2-V: 41–43.

Fuehrer, Ottmar F. von
1939 Liquid Rubber as an Enlarging Medium. *Museum News,* Vol. 16(14): 8.

Krantz, Grover S.
1983 Anatomy and Dermatoglyphics of Three Sasquatch Footprints. *Cryptozoology,* Vol. 2: 53–81.

Kummel, Bernhard, and David Raup
1965 *Handbook of Paleontological Techniques.* San Francisco: W. H. Freeman.